



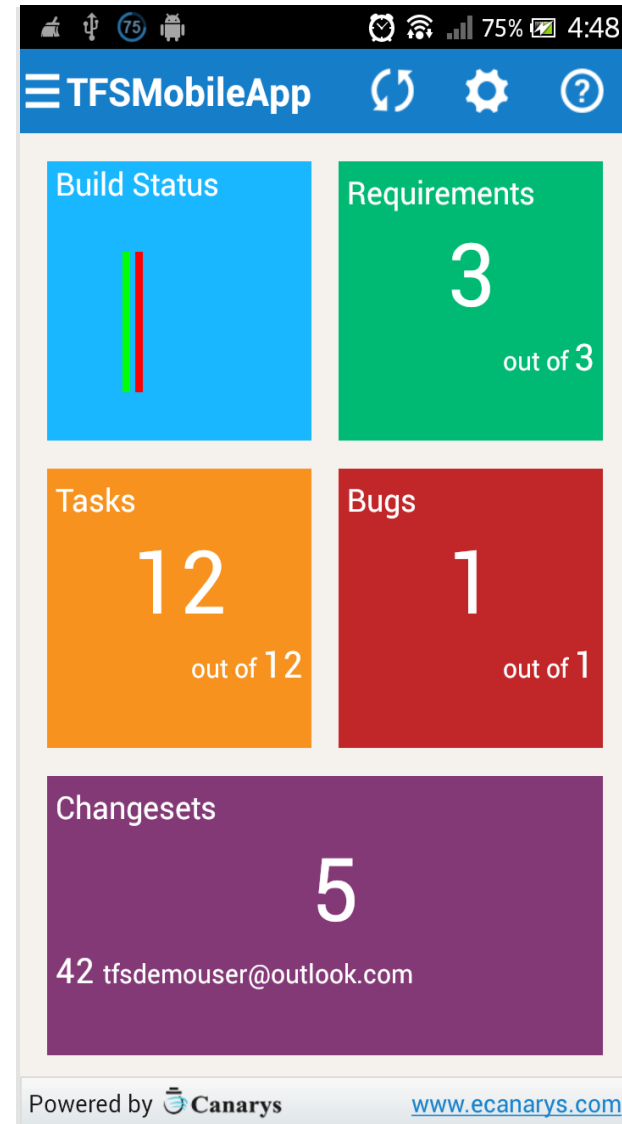
Connect to TFS – The Smart Way!

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Version 1.0

SmartTFS User Manual





 **New Business Enquiries**

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CIN U31101KA1991PTC012096

 [Company Brochure](#)

Product Support

Thank you for choosing SmartTFS. To get the latest product updates, get support online, or for more information about the topics covered in this manual, visit the Support website at

<http://www.ecanarys.com/products/smarttfs>

Phone (US only): +1 609 945 0771

Email : tech-support@ecanarys.com

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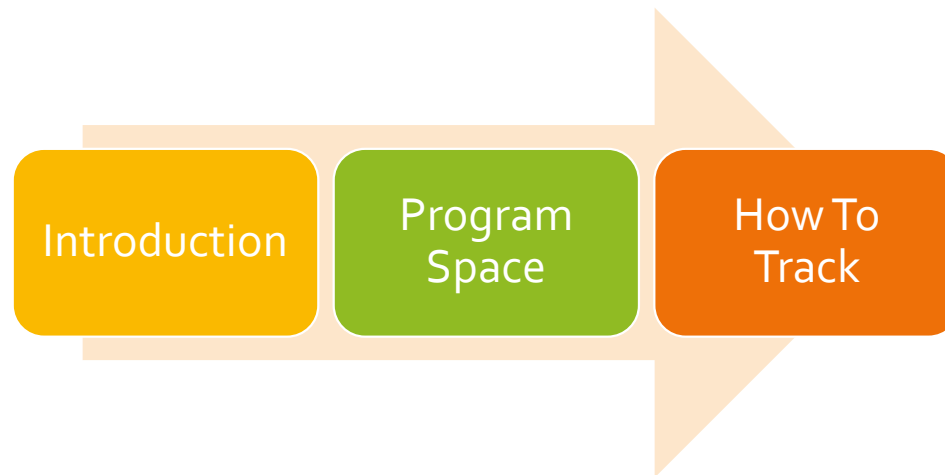
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Connect to TFS – The Smart Way!

Contents



Introduction



Connect to TFS – The Smart Way!

What is SmartTFS for mobile devices?

SmartTFS is a smart way to connect to your Team Foundation Server (in-premise/on-cloud).

Authorized team members can quickly connect to their Team Projects using the OData Service on SmartTFS and track their project progress easily on the go. SmartTFS provides a quick access, intuitive layouts, easy navigation and drill-down data widgets to access the real time information on your tasks, requirements, bugs, Changesets and build summary reports.

You can track your project progress on the move.

Which devices does SmartTFS support?

You can install SmartTFS on Android (mobile phones and tablets) operating systems.

How does SmartTFS works?

SmartTFS for mobile devices allows you to access data you stored on Team Foundation Server (in-premise/on-cloud) using OData Service. OData Service model provides a great solution work with data from Team Foundation Server on multiple device types (such as smartphones and tablets) and operating systems. OData has been embraced by numerous developers for building great device-specific applications. OData is accessible from any device and application stack which supports HTTP requests.

Introduction



Connect to TFS – The Smart Way!

What does SmartTFS do?

Using SmartTFS, you can Connect to your Team Projects on the Team Foundation Server (in-premise/on-cloud)

Track the progress of the project on the Home Screen

Track the requirements and its workflow status

Track the tasks from the project/resource level

Track the bugs at the resource level

Track the Changesets at the resource level

Track the build summary at the Team Project level

Track the overall project status across all Team Projects

How to get SmartTFS?

Canarys SmartTFS is a smart way to connect to Team Foundation Server and track the project progress on the move. You can download the app and follow the simple instructions to install it on your Team Foundation Server.

See more details about this app at our website:

<http://www.ecanarys.com/products/smarttfs>

Introduction



How much does SmartTFS cost?

SmartTFS for mobile devices is available for free.

How to install SmartTFS?

Download SmartTFS from the product download page.
Follow the standard installation procedure for any Android App.

How do we ensure the security of your data in SmartTFS?

The app uses SSL protocols to transfer data through both In Premise and On Cloud TFS.

Connect to TFS – The Smart Way!

Program Space – Configure TFS OData Services



Connect to TFS – The Smart Way!

How to configure SmartTFS on the in-premise server?

Primarily, You require an OData service to access the Team Foundation Server through SmartTFS.

Team Foundation Server 2010 and 2012 can be configured to support the TFS OData Services. By default, the only supported connectivity to TFS is through the client object model. This is essentially a wrapper around that API.

Follow these steps to configure TFS OData Services for your on-premises TFS implementation.

To deploy the OData service, you will need the following.

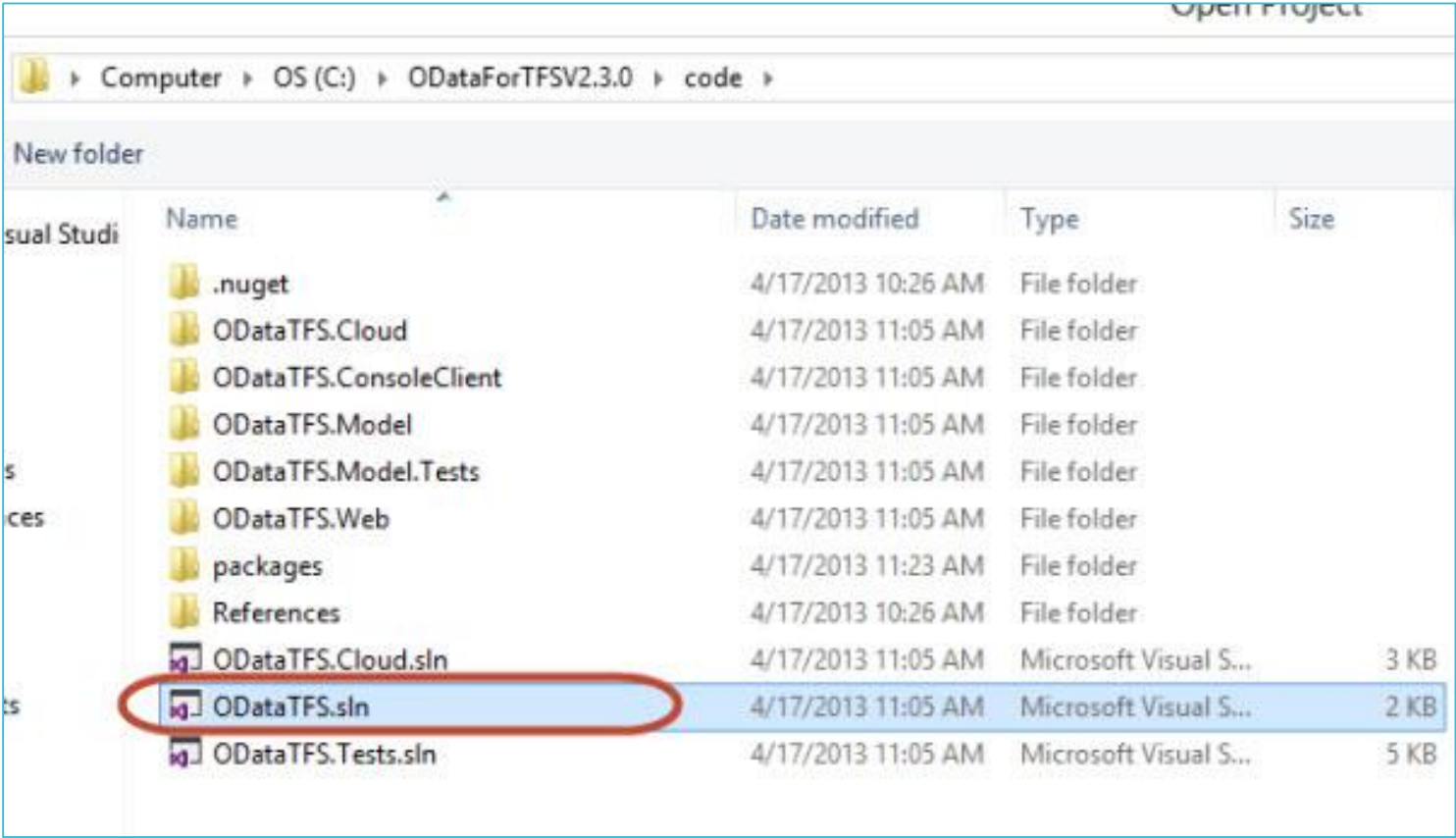
- [Microsoft .NET Framework 4.5](#)
- Team Foundation Server 2012 Update 1 Object Model Installer (included as part of ODataTFS.Web project)
- IIS 7 or later with ASP.NET installed – this means Windows 7 and up, Windows Server 2008 and up
- SSL certificate to secure HTTPS endpoint (if deploying publically)
- Windows Azure account (optional)

Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

Download the [OData Service for Team Foundation Server v2](#) and run the executable to unpack the files to a local folder. The folder contains a readme document that is also helpful for installing and includes steps for optionally installing this service in Azure.

Open the ODataTFS Solution in the Code folder.



Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

From the ODataTFS.Web project, open the Web.config file to set the TFS Connection. Modify the ODataTFS.TfsServer appSetting to point to your TFS Server.

TFS OData Service uses basic authentication to pass the username and password to the TFS Server. This passes those values as plain text so it is highly encouraged to use HTTPS. The remaining steps assume you are configuring this to use HTTPS. If you are not or want to use it for testing. Change the Transport security to TransportCredentialOnly

```
<appSettings>
  <add key="ODataTFS.AuthProvider" value="Microsoft.Samples.DPE.ODataTFS.Web.Infrastructure.TFSAuthProvider" />

  <!--
  TFS endpoint goes here.
  Use https://visualstudio.com for Team Foundation Service (subdomain added in service code during runtime).
  Example local endpoint: https://tfs:8080/tfs
  -->
  <add key="ODataTFS.TfsServer" value="http://tfs2012test:8080/tfs" />

  <!-- WorkItemTrackingCacheRoot can be modified to change the location of the TFS OM cache.
  <add key="WorkItemTrackingCacheRoot" value="C:\TFSOMCache" />
  -->
</appSettings>
```

```
<bindings>
  <webHttpBinding>
    <binding_name="higherMessageSize" maxReceivedMessageSize="157286400" max
    <security mode="Transport"></security>
    <readerQuotas maxDepth="157286400" maxStringLength="157286400"
    </binding>
  </webHttpBinding>
</bindings>
</system.serviceModel>
```

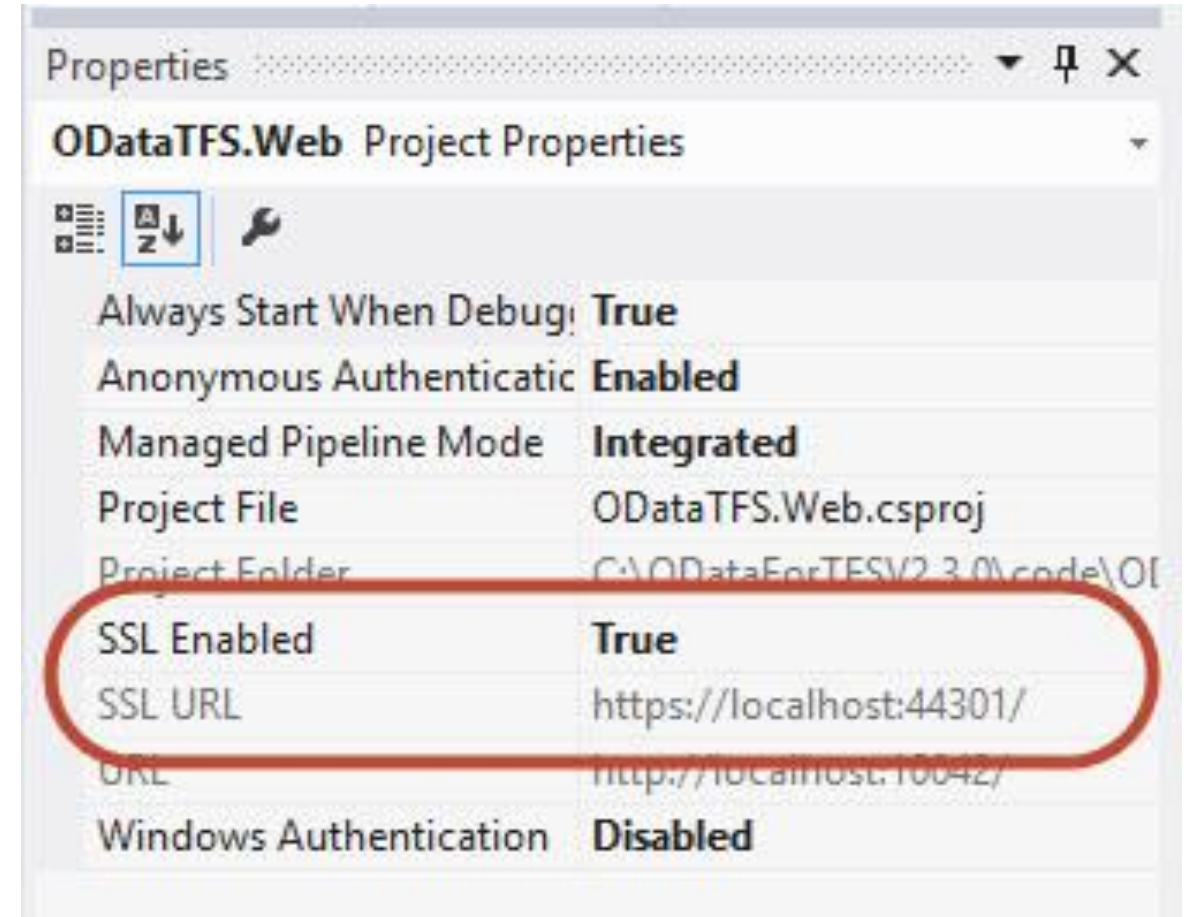
Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

To test locally, single click on the project to verify SSL settings are enabled

Copy the SSL URL value to the clipboard.

Paste it into the Project URL setting in the ODataTFS.Web project properties.



Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

To test locally, single click on the project to verify SSL settings are enabled

Copy the SSL URL value to the clipboard.

Paste it into the Project URL setting in the ODataTFS.Web project properties.

The screenshot shows the 'Servers' configuration window. The 'Project Url' field is highlighted with a red oval and contains the value 'https://localhost:44301/'. The 'Create Virtual Directory' button is visible to the right of the field. Other settings include 'Apply server settings to all users (store in project file)' checked, 'Use Visual Studio Development Server' unselected, 'Auto-assign Port' selected, 'Specific port' set to 10000, 'Virtual path' set to '/', 'NTLM Authentication' unchecked, 'Use Local IIS Web server' selected, 'Use IIS Express' checked, 'Override application root URL' unchecked, and 'Use Custom Web Server' unselected.

Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

Run the project.

It will launch IE and prompt you to continue past the invalid SSL.

Click continue and the TFS OData page will display.

If you scroll half way down you will see several queries you can run.

Test returning a list of work items.

Resources	Path
Builds	https://localhost/DefaultCollection/Builds
	https://localhost/DefaultCollection/Projects(projectName)/Builds
Build Definitions	https://localhost/DefaultCollection/Projects(projectName)/BuildDefinitions
Changesets	https://localhost/DefaultCollection/Changesets
	https://localhost/DefaultCollection/Projects(projectName)/Changesets
	https://localhost/DefaultCollection/Branches(path)/Changesets
	https://localhost/DefaultCollection/Builds(Project=prjName,Definition=BuildDef,Number=BuildNum)/Changesets
Changes	https://localhost/DefaultCollection/Changesets(id)/Changes
Branches	https://localhost/DefaultCollection/Branches
	https://localhost/DefaultCollection/Projects(prjName)/Branches
WorkItems	https://localhost/DefaultCollection/WorkItems
	https://localhost/DefaultCollection/Builds(Project=prjName,Definition=BuildDef,Number=BuildNum)/WorkItems
	https://localhost/DefaultCollection/Changesets(id)/WorkItems
	https://localhost/DefaultCollection/Projects(projectName)/WorkItems
	https://localhost/DefaultCollection/Queries(id)/WorkItems
Attachments	https://localhost/DefaultCollection/WorkItems(id)/Attachments
Links	https://localhost/DefaultCollection/WorkItems(id)/Links

Program Space – Configure TFS OData Services

How to configure SmartTFS on the in-premise server?

Update the URL to something similar to the following:


<https://localhost:44301/DefaultCollection/WorkItems>

Adjust accordingly if your collection name, server name, or port is different.

This should display a list of work items in a format similar to a RSS/ATOM feed.

WorkItems

You are viewing a feed that contains frequently updated content. When you subscribe to a feed, it is added to the Common Feed List. Updated information from the feed programs. [Learn more about feeds.](#)

 [Subscribe to this feed](#)

Create new user

Wednesday, March 13, 2013, 2:46:14 PM

Branding

Wednesday, March 13, 2013, 2:13:35 PM

test

Wednesday, March 13, 2013, 8:49:59 AM

Welcome Page should display

Wednesday, March 13, 2013, 8:31:16 AM

New User Creation

Wednesday, March 13, 2013, 8:30:34 AM

Program Space – Configure TFS OData Services

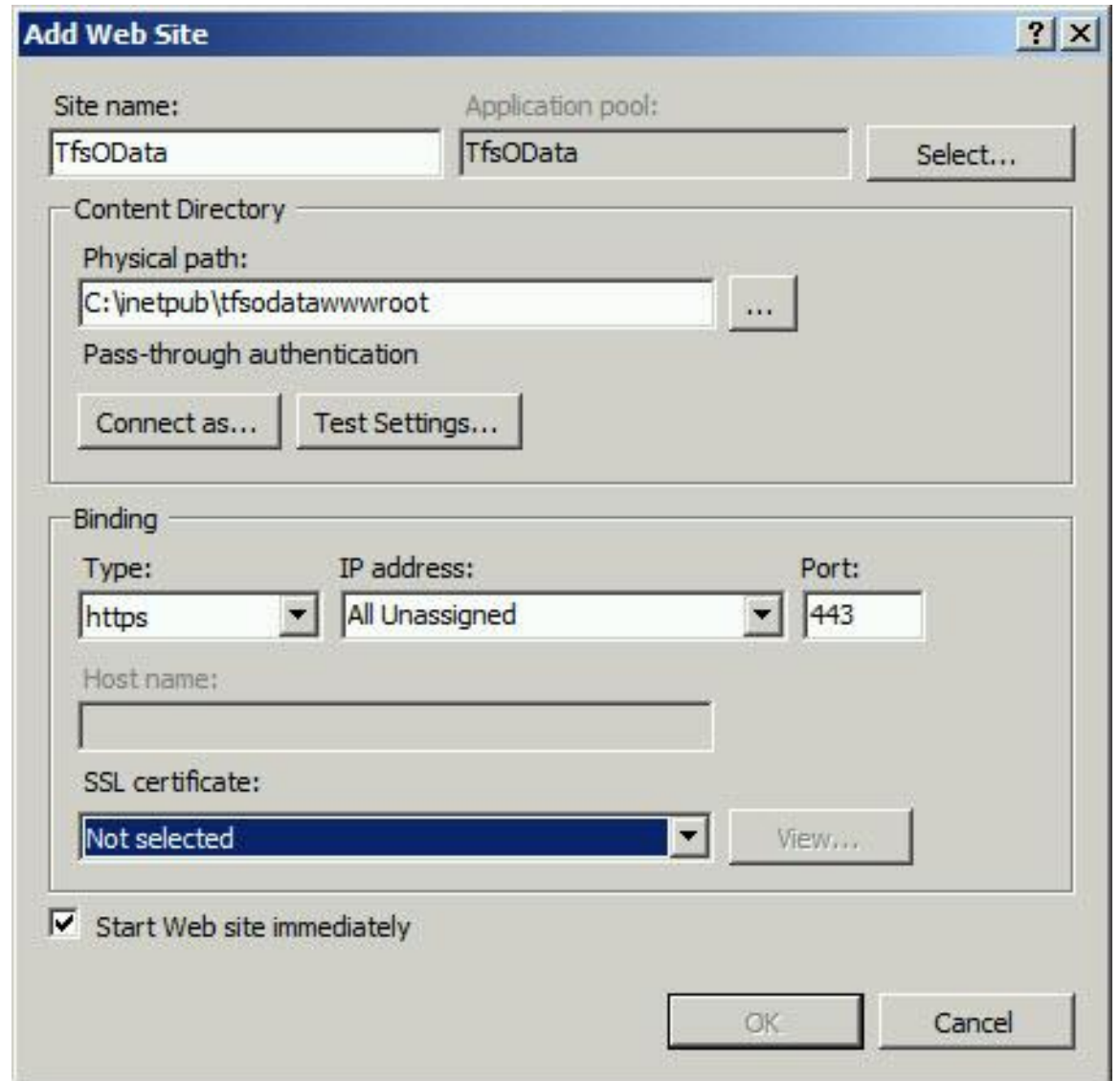
How to configure SmartTFS on the in-premise server?

Now that you have it running locally, deploy it to any IIS server in your network or again you can host this in Azure (see readme documentation included with OData Service for TFS v2 download).

Create a website, specify a local folder, set the SSL to the appropriate server.

Make sure to configure a trusted SSL certificate or TFS Agile Poker will return an error.

Ensure the application pool that this service is going to be used is set to use .Net 4.0 framework.



The screenshot shows the 'Add Web Site' dialog box in IIS Manager. The 'Site name' field is set to 'TfsOData'. The 'Application pool' is set to 'TfsOData'. The 'Content Directory' section shows the 'Physical path' as 'C:\inetpub\tfsodatawwwroot'. The 'Pass-through authentication' section has 'Connect as...' and 'Test Settings...' buttons. The 'Binding' section shows 'Type' as 'https', 'IP address' as 'All Unassigned', and 'Port' as '443'. The 'Host name' field is empty. The 'SSL certificate' dropdown is set to 'Not selected'. The 'Start Web site immediately' checkbox is checked. The 'OK' and 'Cancel' buttons are at the bottom right.

Add Web Site

Site name: TfsOData Application pool: TfsOData Select...

Content Directory

Physical path: C:\inetpub\tfsodatawwwroot ...

Pass-through authentication

Connect as... Test Settings...

Binding

Type: https IP address: All Unassigned Port: 443

Host name:

SSL certificate: Not selected View...

☒ Start Web site immediately

OK Cancel

Program Space – Configure TFS OData Services

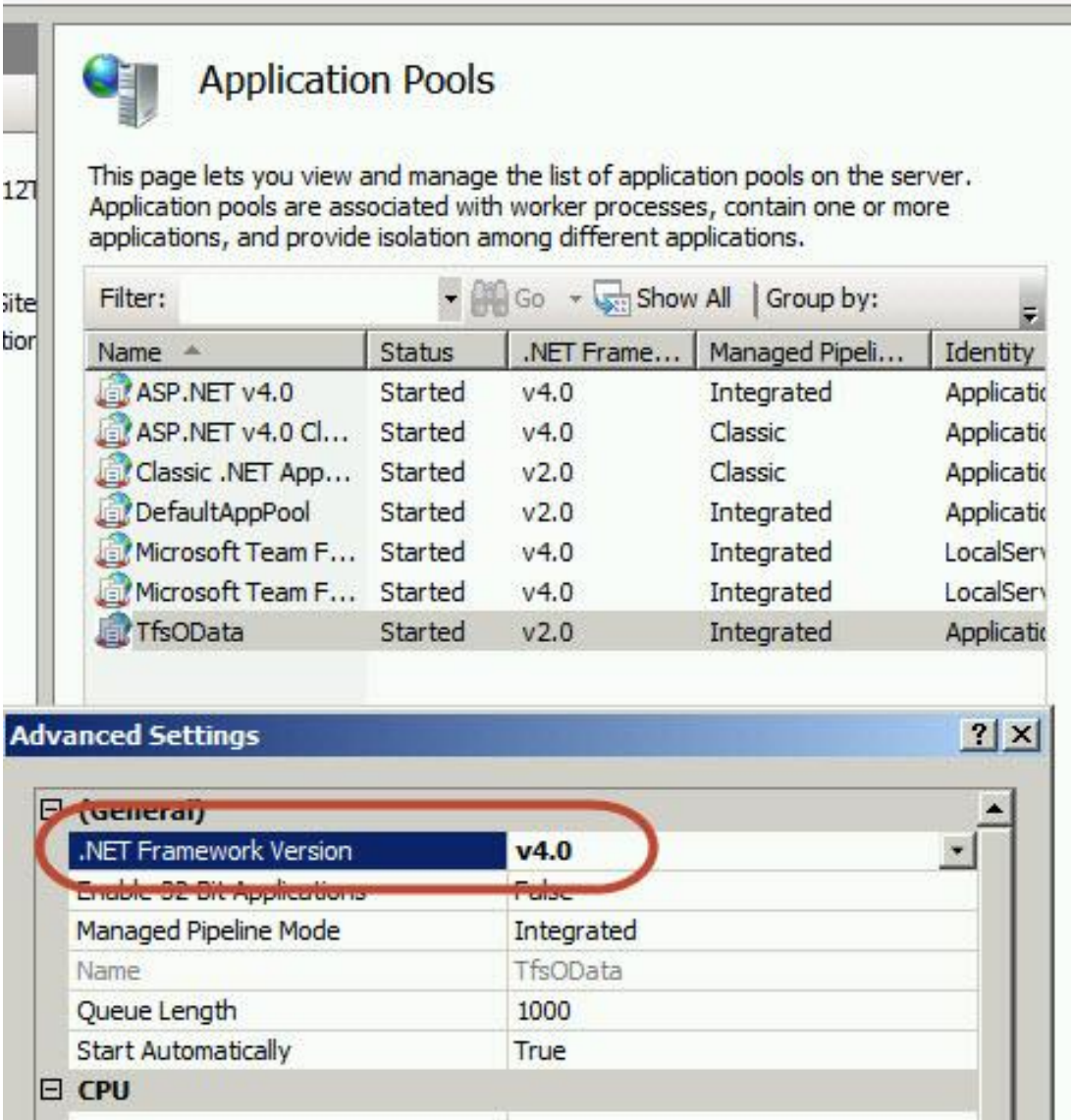
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Ensure the application pool that this service is going to be used is set to use .Net 4.0 framework.



Program Space – Configure TFS OData Services



Connect to TFS – The Smart Way!

Troubleshooting

Common Issues

Two common errors seen when building and deploying OData services are HTTP 500 and 404. Here are the most common causes and what to do about them.

HTTP 500 Internal Server Error after new deployment

Permissions - ensure application pool identity running deployed service has appropriate permission to database.

HTTP 404

You may have deployed the schema, but not the data. OData services return a 404 when you query by primary keys that don't exist. For example, you would get this error if testing with the following, which asks for a product with a key of 843, when the data has not been deployed:

Program Space – Configure TFS OData Services - References



Connect to TFS – The Smart Way!

References

Configure TFS OData Services

<http://www.tfsagilepoker.com/HowTo/Win8/ConfigureTfsOdataServices>

OData Service for Team Foundation Server v2

<http://www.microsoft.com/en-us/download/details.aspx?id=36230>

Deploying OData Services using IIS & SQL Server

<http://msdn.microsoft.com/en-us/data/gg192995.aspx>

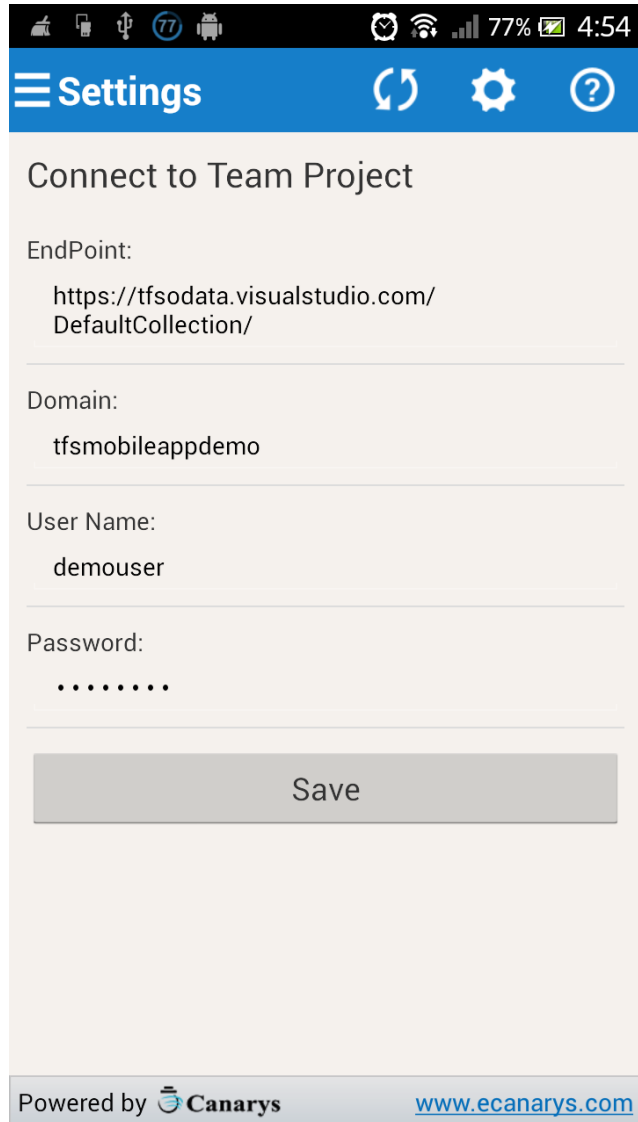
Team Foundation Server OData API

<https://tfsodata.visualstudio.com/>

What is the OData protocol? OData Home

<http://www.odata.org/>

How To Tasks



The screenshot shows the 'Settings' screen of the SmartTFS application. The status bar at the top indicates 77% battery and 4:54. The header bar is blue with a hamburger menu icon, the word 'Settings', and refresh, settings, and help icons. The main content area is titled 'Connect to Team Project' and contains four input fields: 'EndPoint:' with the value 'https://tfsodata.visualstudio.com/DefaultCollection/', 'Domain:' with 'tfsmobileappdemo', 'User Name:' with 'demouser', and 'Password:' with masked characters. A 'Save' button is at the bottom. The footer shows 'Powered by Canarys' and the website 'www.ecanarys.com'.

Settings

Connect to Team Project

EndPoint:
https://tfsodata.visualstudio.com/
DefaultCollection/

Domain:
tfsmobileappdemo

User Name:
demouser

Password:
.....

Save

Powered by Canarys www.ecanarys.com

How to configure SmartTFS on the device?

Tap the SmartTFS after installation.

Tap the Settings option.

Fill in the details relevant to your Team Project.

EndPoint: Type the URL to point to your TFS Server

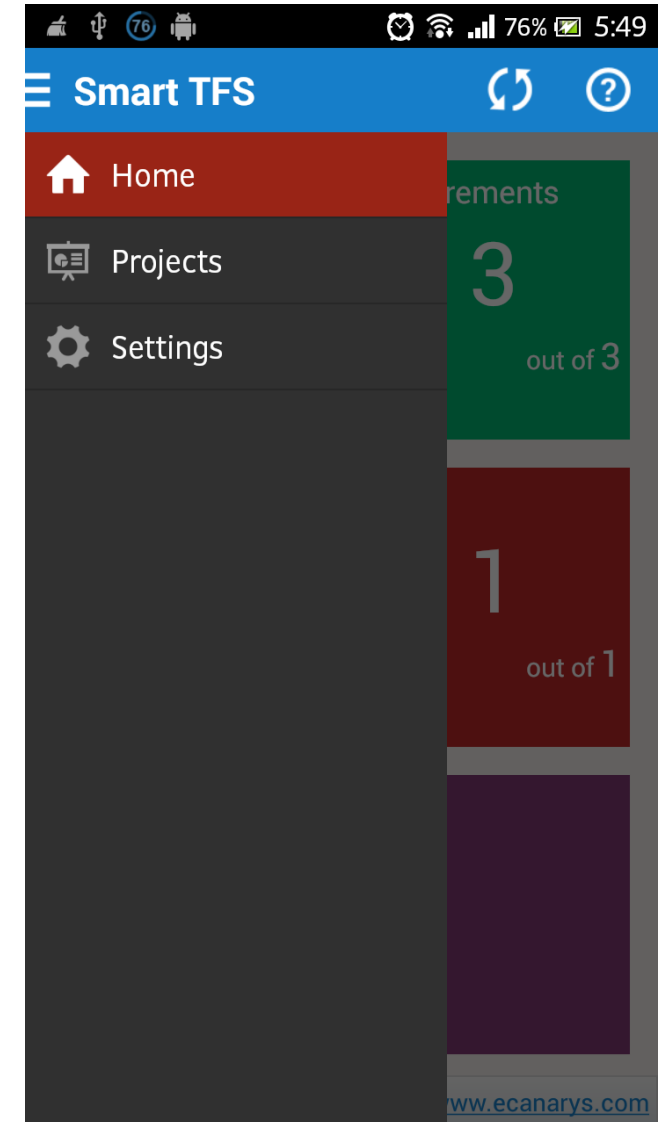
Domain: Type the Domain name

User Name: Type the User Name already registered in your TFS Server

Password: Type the password relevant to the User Name

Tap the Save button to confirm the authentication.

You will see the TFS Collections screen next.



How To Tasks

** Prerequisite: Configure SmartTFS after installation*

How to connect to my Team Project?

Tap the Home button.

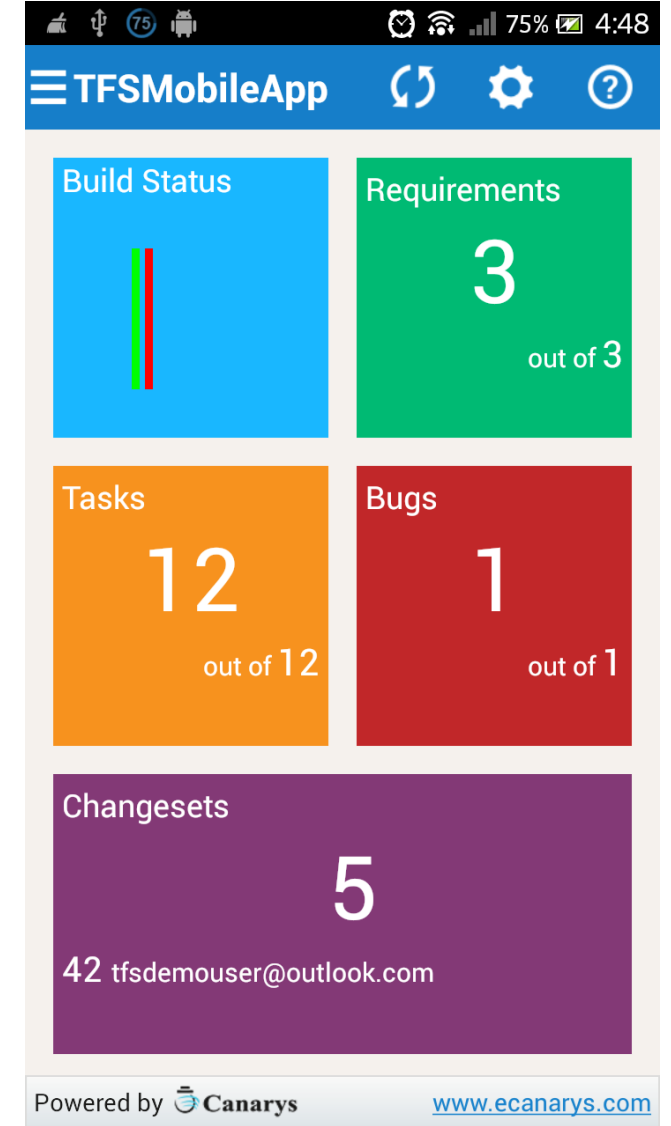
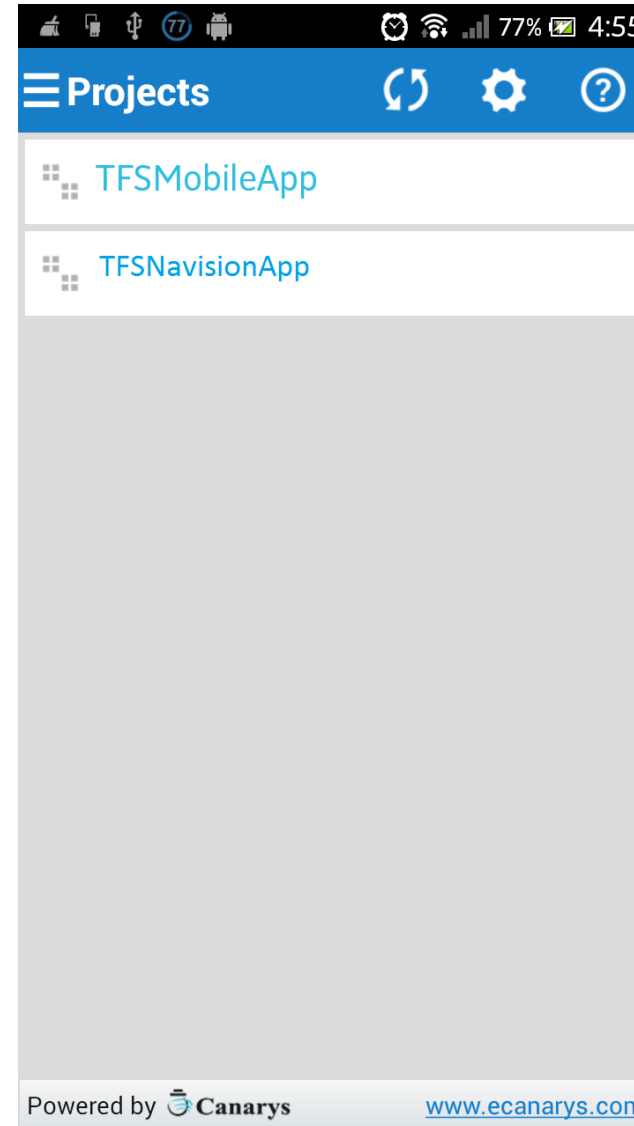
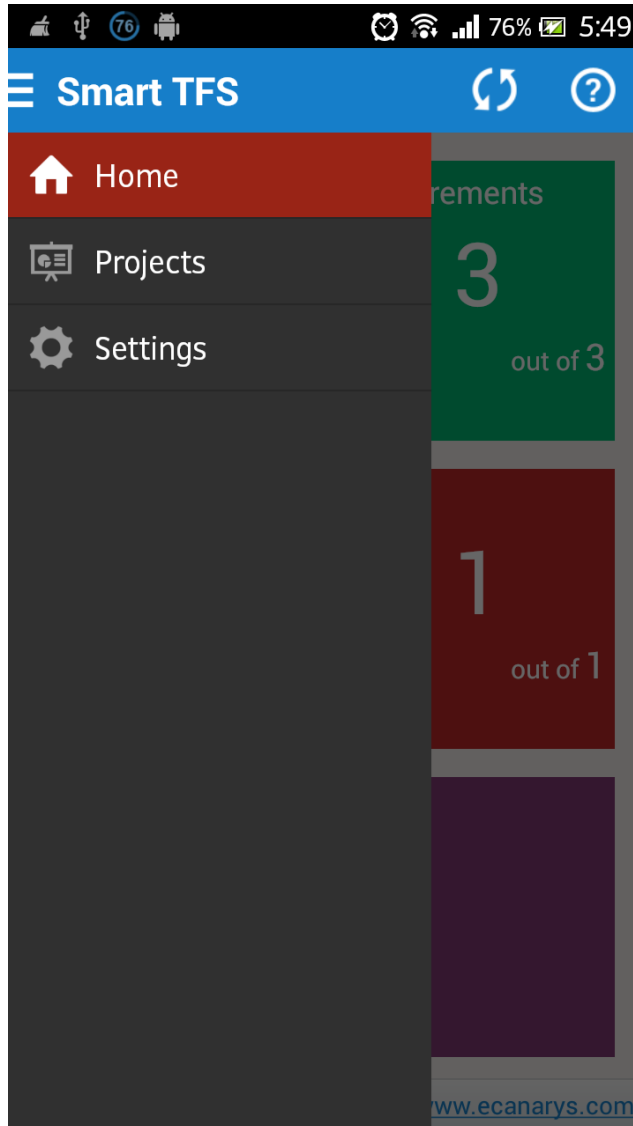
You will see the TFS Collection Home Screen.

Tap the Home option.

You will see the TFS Team Projects.

Tap the Team Project to connect.

You will see the Team project dashboard.



How To Tasks

How to track the progress of the Team project?

Tap the Team Project to connect.

You will see a dashboard of current work in progress.

Build Info: Tap this color tile to view the build status – Succeeded or Failed.

Requirements: Tap this color tile to view the requirements work status – Approved or New.

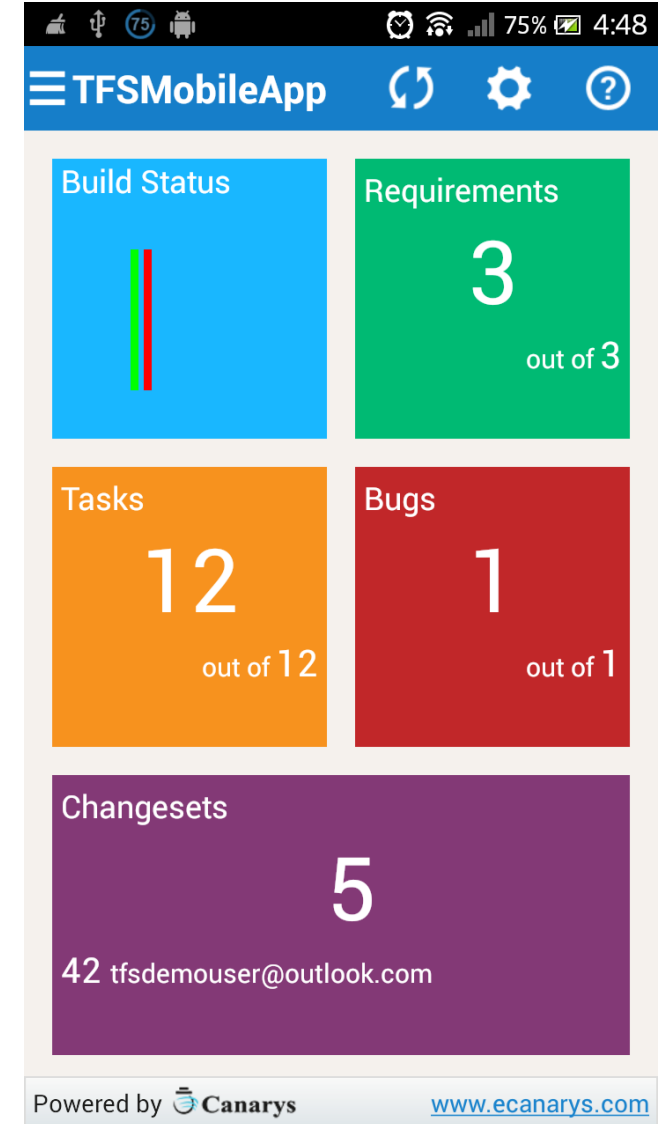
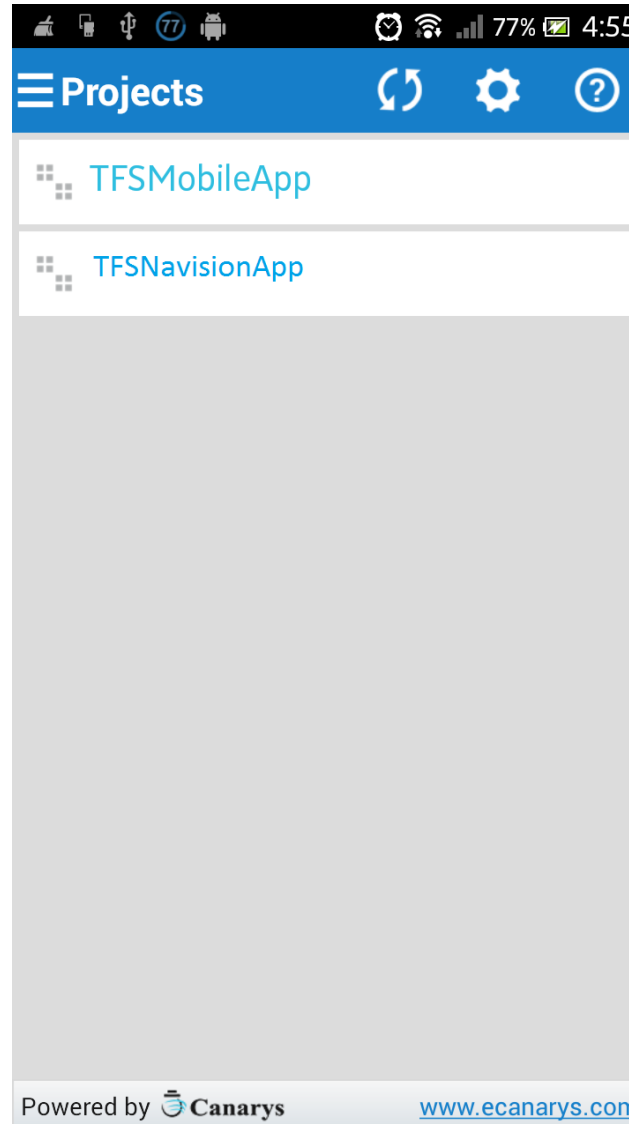
Tasks: Tap this color tile to view the tasks status – Active, Resolved or Closed.

Bugs: Tap this color tile to view the bug status – New, Active or Resolved.

Changesets: Tap this color tile to view the Changesets ordered by latest.

Tap the Refresh icon to refresh the dashboard snapshot.

** Prerequisite: Configure SmartTFS after installation*



How To Tasks

How to track the Requirements and workflow status of the Team project?

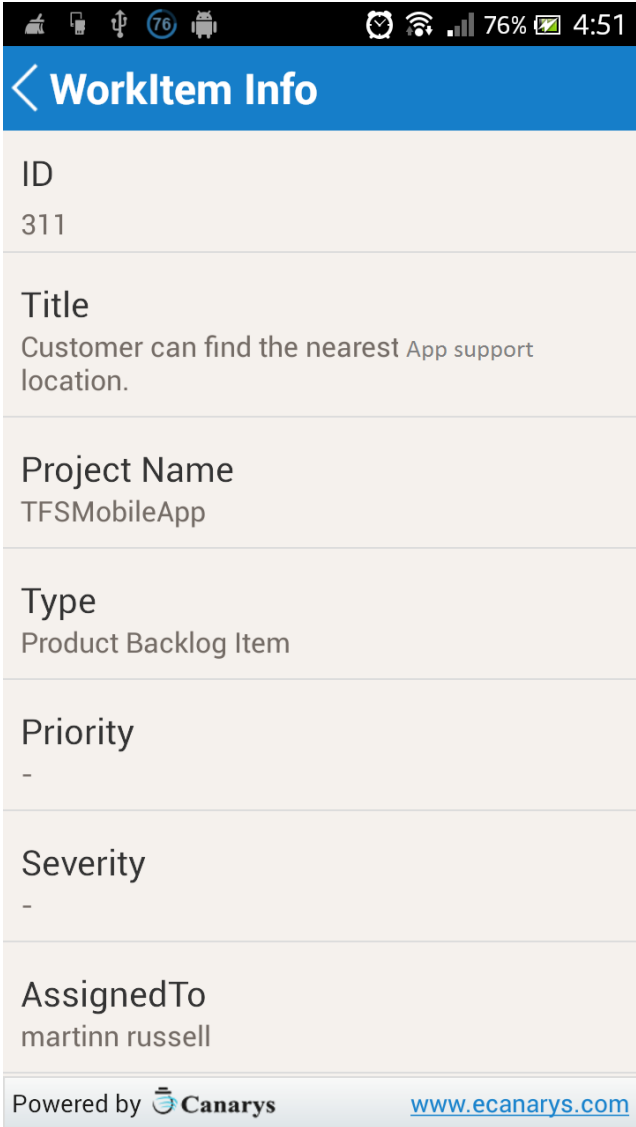
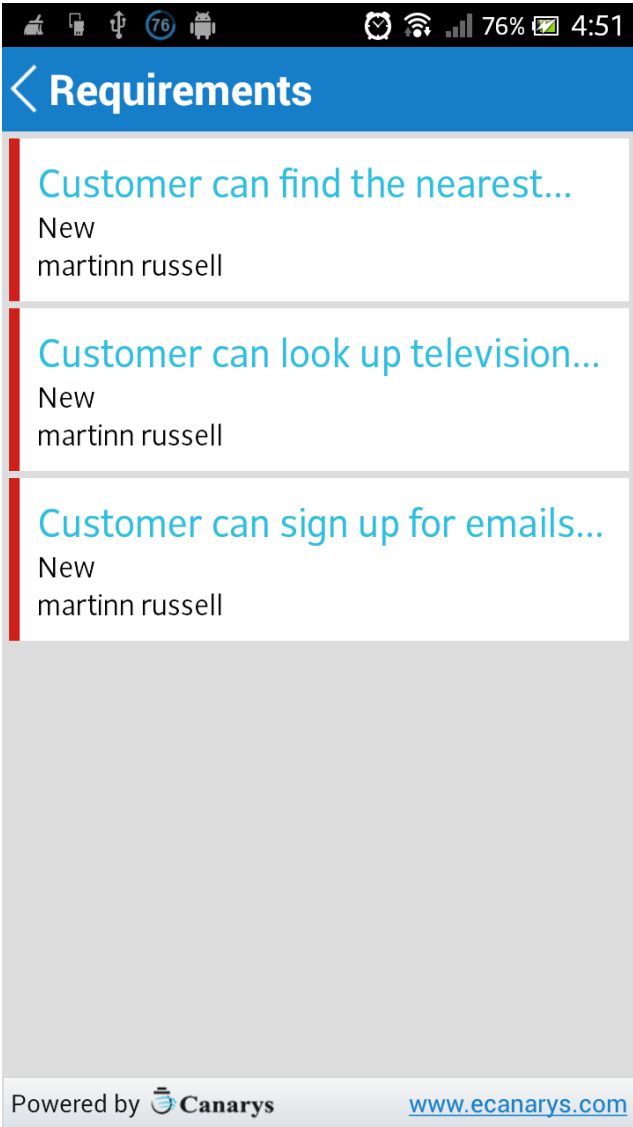
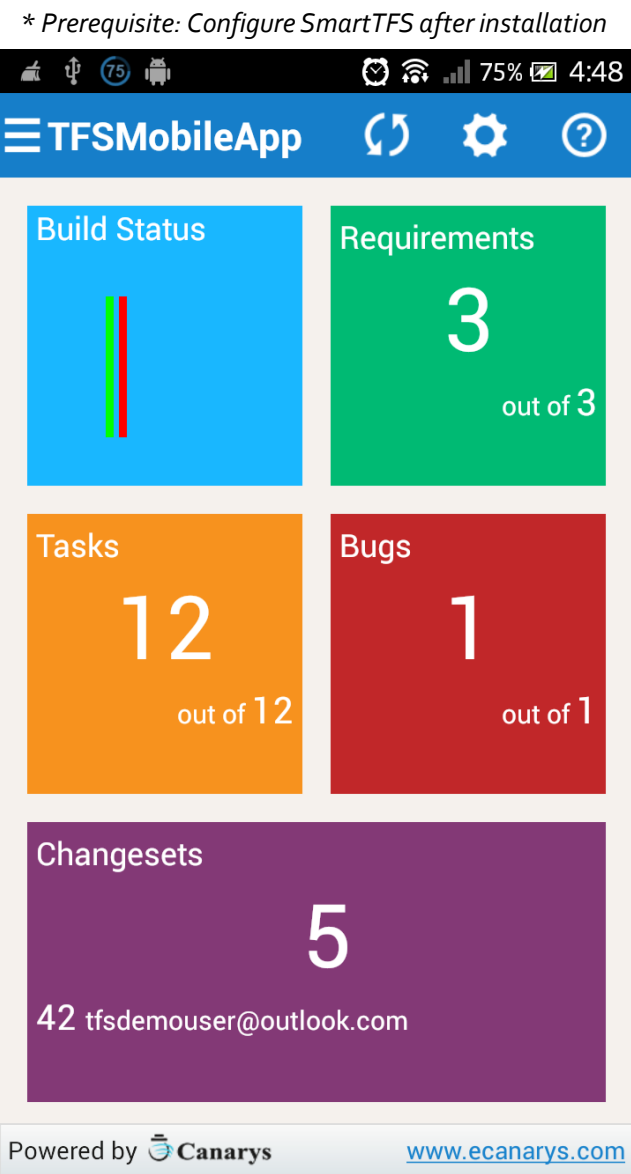
Tap the Team Project to connect.

Tap the Requirements tile.

You will see the requirements sorted by latest entry first.

Tap the Requirement.

You will see the work item info.



How To Tasks

How to track the Tasks from the project level?

Tap the Home option.

Tap the Team Project to connect.

Tap the Tasks tile.

You will see the tasks sorted by latest entry first.

Tap the Task.

You will see the Task work item info.

** Prerequisite: Configure SmartTFS after installation*

The screenshot shows the TFS Mobile App Home screen. At the top, there's a status bar with icons for connectivity and battery. Below it, a blue header bar contains the app name 'TFS MobileApp' and three icons: a refresh icon, a settings gear, and a help question mark. The main area is a grid of five colored tiles: 'Build Status' (blue) with a vertical bar chart, 'Requirements' (green) with the number '3 out of 3', 'Tasks' (orange) with '12 out of 12', 'Bugs' (red) with '1 out of 1', and 'Changesets' (purple) with '5' and '42 tfsdemouser@outlook.com'. At the bottom, a footer bar says 'Powered by Canarys' and 'www.ecanarys.com'.

The screenshot shows the 'Tasks' list screen. It has a blue header bar with a back arrow and the title 'Tasks'. Below the header, there's a list of five task items, each with a title in blue, 'To Do' status, and an assignee email. The tasks are: 'Create database for branch office...' (phillipp.flores@outlook.com), 'Design implementation of feature.' (martinn russell), 'Review design of feature.' (harry.butlerr@outlook.com), 'Create UI for feature.' (phillipp.flores@outlook.com), and 'Create data sync to network...' (phillipp.flores@outlook.com). The last item is partially cut off. At the bottom, a footer bar says 'Powered by Canarys' and 'www.ecanarys.com'.

The screenshot shows the 'WorkItem Info' screen. It has a blue header bar with a back arrow and the title 'WorkItem Info'. Below the header, there's a list of work item details: 'ID' (312), 'Title' (Create database for branch office location lookup.), 'Project Name' (TFS MobileApp), 'Type' (Task), 'Priority' (-), 'Severity' (-), and 'AssignedTo' (phillipp.flores@outlook.com). At the bottom, a footer bar says 'Powered by Canarys' and 'www.ecanarys.com'.

How To Tasks

How to track the Changesets from the project level?

Tap the Team Project to connect.

Tap the Changesets tile.

You will see the Changesets sorted by latest entry first.

Tap the Changesets.

You will see the work item info.

** Prerequisite: Configure SmartTFS after installation*

The screenshot shows the TFS Mobile App interface. At the top, there's a status bar with icons for connectivity and battery. Below it, a blue header bar contains the app name 'TFS MobileApp' and three icons: a refresh icon, a settings gear, and a help question mark. The main area is a grid of five colored tiles: 'Build Status' (blue) with a vertical bar chart, 'Requirements' (green) showing '3 out of 3', 'Tasks' (orange) showing '12 out of 12', 'Bugs' (red) showing '1 out of 1', and 'Changesets' (purple) showing '5' with a sub-item '42 tfsdemouser@outlook.com'. At the bottom, a footer bar says 'Powered by Canarys' with a logo and the website 'www.ecanarys.com'.

The screenshot shows a list of changesets. The header is a blue bar with a back arrow and the title 'Changesets'. The list contains five items, each with a large blue number (ID), the user email, and the timestamp: 42 (tfsdemouser@outlook.com, 2014-05-14 03:54:06 PM), 41 (tfsdemouser@outlook.com, 2014-05-14 03:49:31 PM), 40 (tfsdemouser@outlook.com, 2014-05-13 05:08:07 PM), 39 (tfsdemouser@outlook.com, 2014-05-13 05:08:05 PM), and 38 (tfsdemouser@outlook.com, 2014-05-13 05:08:03 PM). The bottom footer is identical to the previous screen.

The screenshot shows the details for changeset 42. The header is a blue bar with a back arrow and the title 'Changeset Info'. Below it, several fields are listed: 'ID' (42), 'Branch' (-), 'Owner' (tfsdemouser@outlook.com), 'Committer' (tfsdemouser@outlook.com), 'Creation Date' (2014-05-14 03:54:06 PM), and 'Comment' (empty). The bottom footer is identical to the previous screens.

How To Tasks

How to track the Build summary from the project level?

Tap the Team Project to connect.

Tap the Build Info tile.

You will see the Build summary sorted by latest entry first.

Tap the Build result.

You will see the build status info.

* Prerequisite: Configure SmartTFS after installation

The screenshot shows the TFS Mobile App interface. At the top, there's a status bar with icons for connectivity and battery. Below it, a blue header bar contains the app name 'TFS MobileApp' and three icons: a refresh icon, a settings gear, and a help question mark. The main area features five colored tiles: a blue 'Build Status' tile with a vertical bar chart, a green 'Requirements' tile showing '3 out of 3', an orange 'Tasks' tile showing '12 out of 12', a red 'Bugs' tile showing '1 out of 1', and a purple 'Changesets' tile showing '5' and '42 tfsdemouser@outlook.com'. At the bottom, a footer bar says 'Powered by Canarys' and includes the website 'www.ecanarys.com'.

The screenshot shows the 'Builds' screen. It has a blue header with a back arrow and the title 'Builds'. Below the header, there's a list of build entries. The first entry is 'Calculator_DefaultBuild_201...' with a green progress bar and a duration of '54 sec', requested by 'tfsdemo user'. The second entry is 'Calculator_DefaultBuild_201...' with a red progress bar and a duration of '51 sec', also requested by 'tfsdemo user'. The bottom of the screen shows the 'Powered by Canarys' footer with the website 'www.ecanarys.com'.

The screenshot shows the 'Build Status' screen. It has a blue header with a back arrow and the title 'Build Status'. Below the header, there's a list of build details: 'Project Name' (TFS MobileApp), 'Build Definition' (Calculator_DefaultBuild), 'Build Number' (Calculator_DefaultBuild_20140514.1), 'Build Status' (Failed), and 'Last Changed By' (LOCAL AUTHORITY\Elastic Build (tfsmobileappdemo)). At the bottom, there's an 'Errors' section with two error messages: 'Cannot write to the output file "C:\a\src\obj\Debug\Calculator.Calculator.resources". Access to the path "C:\a\src\obj\Debug\Calculator.Calculator.resources" is denied.' and 'Cannot write to the output file "C:\a\src\obj\Debug\Calculator.Properties.Resources.resources". Access to the path "C:\a\src\obj\Debug\Calculator.Properties.Resources.resources" is denied.' The bottom footer bar says 'Powered by Canarys' and includes the website 'www.ecanarys.com'.

How To Tasks

How to use Help?

Tap the Team Project to connect.

Tap the Help icon for more information.

Settings: How to configure SmartTFS app to connect to another Team Foundation Server?

Selecting a Project: How to use SmartTFS app to navigate between Team Projects?

Build: Determine the latest build status – Success, Partial Success or Failed.

Requirements, Tasks and Bugs: Determine the requirements, tasks, bugs and work status.

Changesets: Determine the latest Changesets and work status.

Tap the Refresh icon to refresh the dashboard snapshot.

** Prerequisite: Configure SmartTFS after installation*

